

PROJECT DESCRIPTION

GENERAL:

THIS PROJECT INVOLVES THE MODIFICATION OF AN HIB TO A FULL COLOR ON DEMAND TRAFFIC SIGNAL AT MD 213 AND US 301 SOUTHBOUND IN QUEEN ANNES COUNTY.

MD 213 IS ASSUMED TO RUN IN AN NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION:

THE INTERSECTION OPERATES IN A NEMA FOUR PHASE, FULL-ACTUATED MODE. MD 213 THROUGH MOVEMENTS OPERATE CONCURRENTLY, WITH AN EXCLUSIVE/PERMISSIVE LEFT TURN FOR MD 213 NORTHBOUND APPROACH. THE RAMP FROM US 301 SOUTHBOUND WILL OPERATE ALONE. SEE NOTE UNDER PHASE CHART FOR NORMAL OPERATION.

CONTROLLER INFORMATION:

A NEMA EIGHT-PHASE, FULL-ACTUATED CONTROLLER WITH ALL NECESSARY EQUIPMENT HOUSED IN A POLE-MOUNTED CABINET SHALL BE INSTALLED AT THE INTERSECTION.

PROJECT CONTACTS

CONTACT PERSONS FOR DISTRICT 2 ARE AS FOLLOWS:

MR. ROBERT KIEL
ASSISTANT DISTRICT
ENGINEER - TRAFFIC
PHONE: (410) 810-3240

MR. TERRY O. WRIGHT
ASSISTANT DISTRICT
ENGINEER - MAINTENANCE
PHONE: (410) 810-3250

MR. BARRY CLOTHIER
ASSISTANT DISTRICT
ENGINEER - UTILITIES
410-810-3275

CONTACT FOR OFFICE OF TRAFFIC AND SAFETY:

MR. RICHARD L. DAFF, SR.
CHIEF, TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF -
TRAFFIC OPERATIONS DIVISION
(410) 787-7630

MR. ED RODENHIZER
TEAM LEADER - SIGNAL OPERATIONS
(410) 787-7650

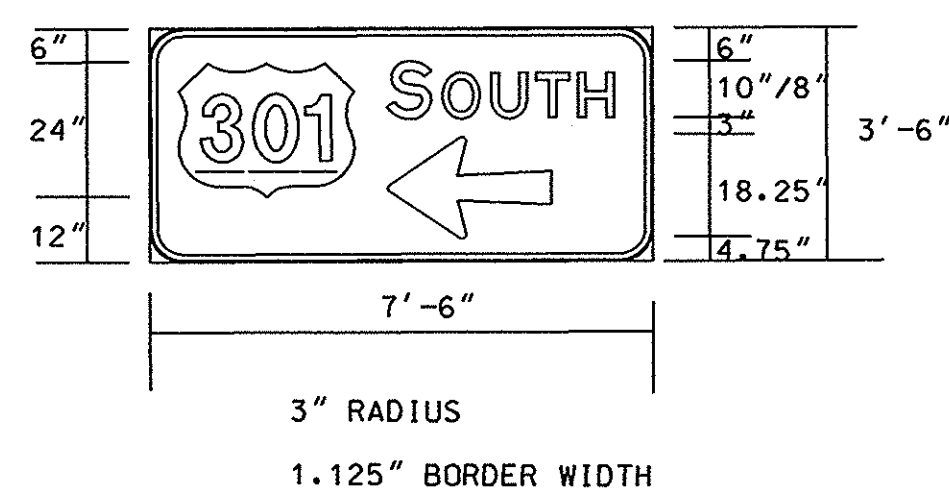
MR. EUGENE BAILEY
TEAM LEADER - SIGN OPERATIONS
(410) 787-7676

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

ITEM #	QUANTITY	DESCRIPTION
9043	1 EA	NEMA EIGHT PHASE, FULL-TRAFFIC-ACTUATED CONTROLLER, VIDEO DETECTION UNIT, TWO 4-CHANNEL AMPLIFIERS AND ALL NECESSARY EQUIPMENT HOUSED IN A POLE MOUNTED CABINET.
9000	26.25 SF	SHEET ALUMINUM 1 EA SHEET ALUMINUM SIGN 7'-6"x3'-6" GREEN BACKGROUND M1-4 30" x 24" 10", 8" "SOUTH" A-2 ARROW @ 180°

SIGNING DETAIL FOR SIGN 8
SEE CONSTRUCTION DETAIL "C"
ON THE SIGNAL PLAN FOR
INSTALLATION LOCATION

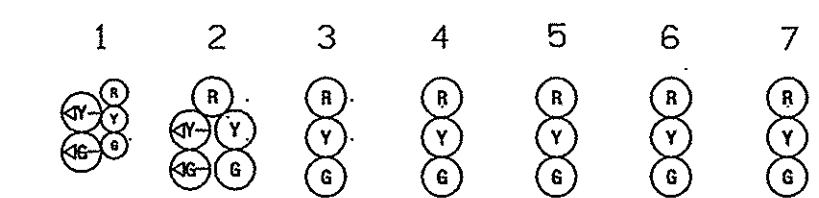


EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
1001	2 EA	MAINTENANCE OF TRAFFIC PER ASSIGNMENT
8001	22 EA	FURNISH AND INSTALL 12 INCH LED SIGNAL HEAD SECTION
8004	3 EA	FURNISH AND INSTALL 8 INCH LED SIGNAL HEAD SECTION
8022	1 EA	REMOVE AND DISPOSE OF MATERIALS AND EQUIPMENT PER ASSIGNMENT
8026	3 EA	FURNISH AND INSTALL VIDEO DETECTION CAMERA & CABLE
8027	14 LF	FURNISH AND INSTALL 1 INCH DETECTOR SLEEVE GALVANIZED
8034	120 EA	SCHEDULE 80 PVC CONDUIT UP TO 4 INCH - TRENCHED
8038	26.25 SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN
8052	400 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR ALUMINUM SHIELDED
8055	75 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 A.W.G.)
8058	870 LF	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING
8059	172 LF	SAW CUT FOR SIGNAL (LOOP DETECTOR)
8063	1 EA	INSTALL CONTROLLER AND CABINET - POLE MOUNTED

PHASING CHART

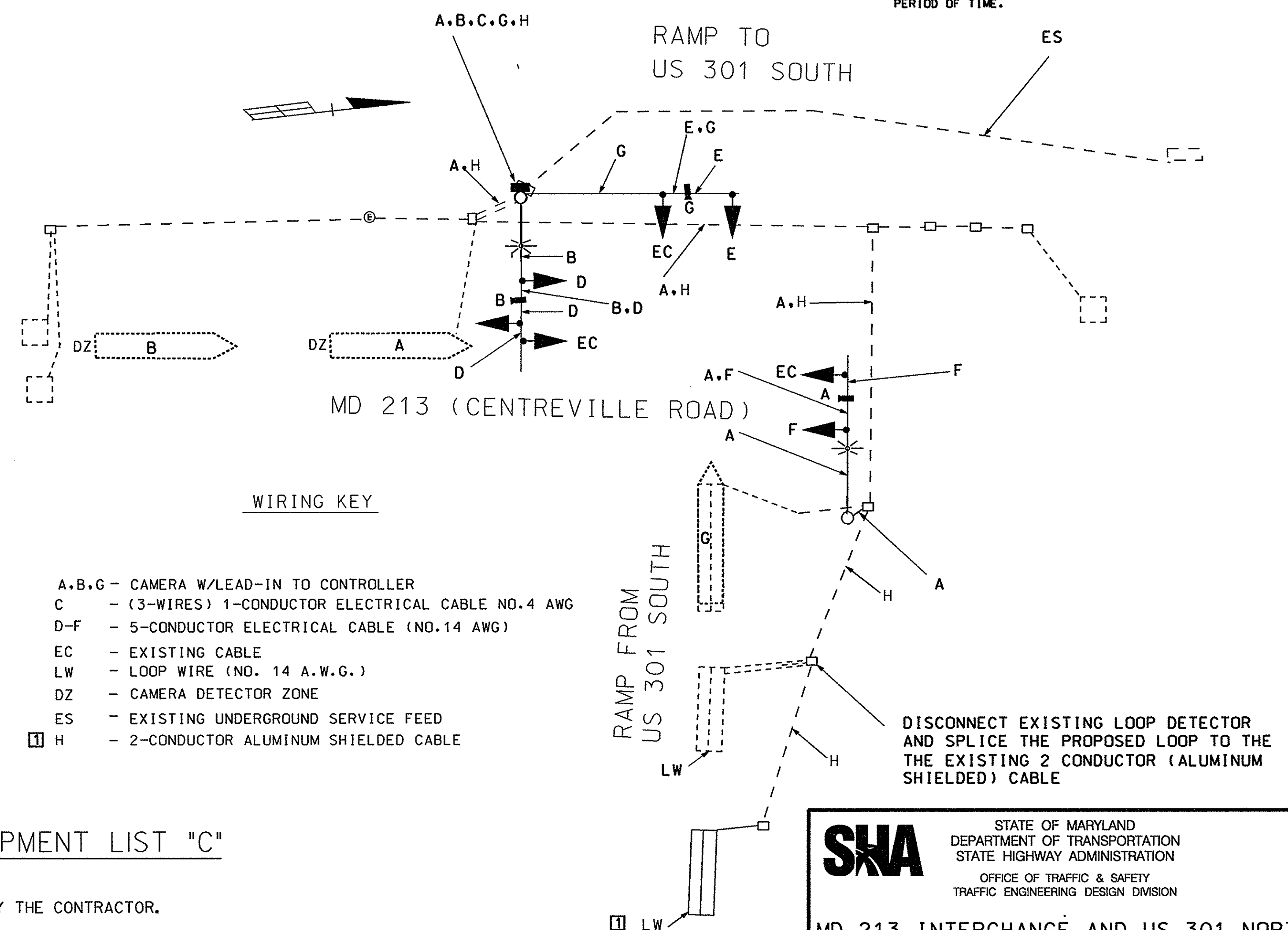


Phase 1 + 6	1	2	3	4	5	6	7
1 Change	G	G	G	R	R	R	R
Phase 2 + 6	G	G	G	G	G	R	R
2 + 6 Change	Y	Y	Y	Y	Y	R	R
Phase 4	R	R	R	R	R	G	G
4 Change	R	R	R	R	R	Y	Y
Flashing Operation	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R

GENERAL NOTES

THIS SIGNAL WILL OPERATE AS AN ON DEMAND SIGNAL. NORMAL OPERATION IS FLASHING ONCE. TRAFFIC CALLS THE QUEING LOOPS SIGNAL WILL OPERATE FOR PERIOD OF TIME.

WIRING DIAGRAM



WIRING KEY

- A, B, G - CAMERA W/LEAD-IN TO CONTROLLER
- C - (3-WIRES) 1-CONDUCTOR ELECTRICAL CABLE NO. 4 AWG
- D-F - 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- EC - EXISTING CABLE
- LW - LOOP WIRE (NO. 14 A.W.G.)
- DZ - CAMERA DETECTOR ZONE
- ES - EXISTING UNDERGROUND SERVICE FEED
- H - 2-CONDUCTOR ALUMINUM SHIELDED CABLE

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED BY THE CONTRACTOR.

QUANTITY	DESCRIPTION
1 EA	CONTROLLER AND CABINET - POLE MOUNTED

ALL REMOVED SIGNAL MATERIALS ARE TO BECOME THE PROPERTY OF THE CONTRACTOR

REDLINE 1 6/4/2007 TEDD APPROVAL

CENTURY ENGINEERING, INC.
CONSULTING ENGINEERS - PLANNERS
32 WEST ROAD
TOWSON, MARYLAND 21204
REVISION "C" 25003.41

SHA STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF TRAFFIC & SAFETY TRAFFIC ENGINEERING DESIGN DIVISION			
MD 213 INTERCHANGE AND US 301 NORTH RAMP, US 301 SOUTHBOUND RAMP			
SIGNALIZATION PLAN SHEET			
SCALE	N/A	DATE	6-01-2006
		CONTRACT NO.	AT9095185
DESIGNED BY	DLA	COUNTY	QUEEN ANNES
DRAWN BY	DLA	LOGMILE	17021305.32
CHECKED BY		TMS NO.	H652X
FAP NO.	N/A	TOD NO.	3438C
TS NO. 3438C1	DRAWING	SG--	OF
		SHEET NO.	2 OF 2